

REMARKS

Claims 1-21 are pending in the application. The amendments to claims 1, 11, 19, and 21 serve to further clarify and distinguish the presently claimed invention. Support for amendment to claim 1 can be found at pages 2 and 5 in the specification and FIG. 2 in the drawings. Support for amendment to claim 11 can be found in claims 12-16 as originally presented. Support for amendments to claims 19 and 21 can be found at page 2 in the specification. No new matter has been inserted into the application.

Rejection Under 35 U.S.C. § 102(e) by Teller (U.S. Patent Application Publication No. 2002/0013538)

Claims 1-4, 7, and 11-15 have been rejected under 35 U.S.C. § 102(e) as being anticipated by Teller. Applicant traverses this rejection. Reconsideration and withdrawal thereof are respectfully requested.

Applicant asserts that the presently claimed invention is distinguished over Teller.

The Presently claimed Invention

The inventive baby health monitoring device is a single unit device worn by a baby comprising sensors, a display screen, a microprocessor and a means for communicating with a computer as described at pages 2 and 5 in the specification and exemplified in FIG. 2. The presently claimed invention is also directed to methods of facilitating determination of health of a baby, identifying a viral infection and early onset of a viral infection by reviewing and analyzing the data obtained by the inventive baby health monitoring device.

Teller

Teller discloses a health monitoring system comprising several separate units connected to each other to process the data measured by a sensor unit worn by a patient. Other required units for Teller's health monitoring system include a receiving unit, a display unit, and a network interface unit, which are physically separate from the sensor unit worn by the patient. As shown in Fig. 1 in the Teller reference, for the health monitoring system of Teller to function properly, signals must be transmitted from the sensor unit to the receiving unit to monitor the health signs. Therefore, the minimum requirement for the health monitoring system of Teller is combination of at least two of the above-mentioned units. Thus, Teller fails to disclose or suggest a single unit health monitoring device worn by a baby comprising sensors, a display screen, a microprocessor and a means for communicating with a computer, as in the presently claimed invention.

Rejected Claims

Following are Applicant's remarks in response to the Examiner's response for each of the following claims.

Claim 1: The Examiner states that the claims of the present invention do not recite that the sensor unit, a microprocessor and a display screen have to be in one unit and thus is anticipated by Teller disclosing a device comprising a skin temperature sensor connected to a microprocessor, a movement sensor, a display screen, and a means for communicating with a computer.

Distinctions of the presently claimed invention over Teller

Teller discloses a health monitoring system which is connected by several individual units including a sensor unit 102, a receiving unit 110, a display unit 112, a computer port unit 114 (microprocessor) and a network interface unit 116. Applicant submits that the sensor unit in Teller is worn by a patient and the sensor unit itself lacks a microprocessor and a display screen. Thus, the sensor unit itself alone cannot display the monitored health signs. The sensor unit of Teller must be connected to a microprocessor and a display screen which are physically separated from the sensor unit to be able to display the monitored signs.

In contrast, the inventive monitoring device comprises a microprocessor and a display unit in a single unit worn by a baby enabling monitoring of health signs without being connected to any other unit as described at pages 2 and 5 in the specification and exemplified in FIG. 2. The inventive monitoring device also displays health condition on the same unit as exemplified in FIG. 10. Other optional elements such as personal computers and a repeater that may be included in the inventive system may be connected to the inventive monitoring device to communicate with each other.

However, in view of the Examiner's comments, to further distinguish the presently claimed invention, claim 1 has been amended to explicitly indicate that the inventive device is a single unit device worn by a baby. Therefore, Teller fails to disclose or suggest a monitoring device comprising all of the components in a single unit to process and analyze the data as in the presently claimed invention. Accordingly, Teller fails to anticipate the present invention.

Claim 2: The Examiner states that Teller discloses using a humidity sensor. However, as disclosed above, since Teller fails to anticipate claim 1, claim 2 must also be novel over Teller. Therefore, it is believed that this rejection has been overcome.

Claim 3: The Examiner states that the device in Teller is shaped as a band. However, as disclosed above, since Teller fails to anticipate claim 1, claim 3 must also be novel over Teller. Therefore, it is believed that this rejection has been overcome.

Claim 4: The Examiner states that the device could be used on a baby's appendage. However, as disclosed above, since Teller fails to anticipate claim 1, claim 4, which ultimately depends from claim 1, must also be novel over Teller. Therefore, it is believed that this rejection has been overcome.

Claim 7: The Examiner states that the computer in Teller is connected to a web server so as to be in communication with other computers at home or at hospital. However, as disclosed above, since Teller fails to anticipate claim 1, claim 7, which ultimately depends from claim 1, must also be novel over Teller. Therefore, it is believed that this rejection has been overcome.

Claim 11: The Examiner states that Teller implicitly discloses that the monitored patient temperatures are the corrected temperatures that are monitored over time and analyzed to determine trends. However, claim 11 has been amended to depend from claim 1 and further distinguish the presently claimed invention. Accordingly, as disclosed above, since Teller fails to

anticipate claim 1, claim 11 must also be novel over Teller. Therefore, it is believed that this rejection has been overcome.

Claims 12: The Examiner states that Teller comprises ambient temperature profile over the set time period. However, as disclosed above, since Teller fails to anticipate claim 1, claim 12, which ultimately depends from claim 1, must also be novel over Teller. Therefore, it is believed that this rejection has been overcome.

Claim 13: The Examiner states that Teller implicitly discloses a chart comprising movement profile over the set time period. However, as disclosed above, since Teller fails to anticipate claim 1, claim 13, which ultimately depends from claim 1, must also be novel over Teller. Therefore, it is believed that this rejection has been overcome.

Claim 14 and 15: The Examiner states that the chart in Teller is displayed on a solid medium. However, as disclosed above, since Teller fails to anticipate claim 1, claims 14 and 15, which ultimately depend from claim 1, must also be novel over Teller. Therefore, it is believed that this rejection has been overcome.

Rejection Under 35 U.S.C. § 103(a) Over Teller

Claims 5, 6, 8-10, and 16-21 have been rejected under 35 U.S.C. § 103(a) as being “obvious” over Teller alone. Applicant traverses this rejection. Reconsideration and withdrawal of this rejection are respectfully requested.

Rejected Claims

Claims 5-6: The Examiner states that though a repeater is not particularly disclosed in Teller, it would have been obvious to use a repeater at the home computer because the use of a repeater in a computer system to receive signal is conventional in the art.

The Examiner has failed to establish *prima facie* obviousness of the presently claimed invention. Teller is discussed above. Teller fails to disclose or suggest a single unit monitoring device comprising a skin temperature sensor connected to a microprocessor; a humidity sensor; a movement sensor; a display screen; and a means for communicating with a computer to process and analyze the data, as in the presently claimed invention.

Further, since claim 1, which claims 5 and 6 ultimately depend from, is believed to be distinguished from Teller as discussed above, Teller fails to provide any motivation to make a single device, comprising a skin temperature sensor connected to a microprocessor; a humidity sensor; a movement sensor; a display screen; and a means for communicating with a computer, which is connected to a repeater as in the presently claimed invention. Accordingly, it is believed that the presently claimed invention is not obvious over Teller.

Claim 8: The Examiner states that although Teller fails to specifically discuss the infrequent movement of the baby, it would have been obvious to consider infrequent movements of the baby as a factor to determine an abnormal situation in the Teller's monitoring system.

The Examiner has failed to establish *prima facie* obviousness of the invention. Teller is discussed above. Teller is discussed above. Teller fails to disclose or suggest a single unit monitoring device comprising a skin temperature sensor connected to a microprocessor; a

humidity sensor; a movement sensor; a display screen; and a means for communicating with a computer to process and analyze the data, as in the presently claimed invention.

Further, since claim 1, which claim 8 depends from, is believed to be distinguished from Teller as discussed above, Teller fails to provide any motivation to make a single device, comprising a skin temperature sensor connected to a microprocessor; a humidity sensor; a movement sensor; a display screen; and a means for communicating with a computer, which is connected to a repeater as in the presently claimed invention. Teller also fails to disclose or suggest simultaneously monitoring, comparing and analyzing corrected skin temperature and movement of a baby, and ambient temperature surrounding the baby with the inventive single unit monitoring device. Thus, in view of the fact that Teller fails to provide any motivation to make a device with the indicated features on a single device and monitor a baby for the various indications, the Teller reference cannot be said to support an obviousness rejection of the presently claimed method.

Claim 9: The Examiner states that the instructions disclosed in Teller appear to be in a computer program which is inherently in written form.

The Examiner has failed to establish *prima facie* obviousness of the invention. As described above in response to rejection of claim 8, which claim 9 depends from, the inventive method of claim 8 is believed not to be obvious over Teller. Further, Teller fails to disclose or suggest instructions in written form to be provided to a user of the inventive device as in the presently claimed invention. Accordingly, it is believed that the presently claimed invention is not obvious over Teller.

Claim 10: The Examiner states that the instructions in Teller are transmitted by broadcast.

The Examiner has failed to establish *prima facie* obviousness of the invention. As described above in response to rejection of claim 8, which claim 10 depends from, the inventive method of claim 8 is believed not to be obvious over Teller. Further, Teller fails to disclose or suggest instructions to be transmitted by broadcast to a user of the inventive device as in the presently claimed invention. Accordingly, it is believed that the presently claimed invention is not obvious over Teller.

Claim 16: The Examiner states that though Teller fails to disclose that the chart is displayed on paper, it would have been obvious to print the chart on a piece of paper for easy examination.

The Examiner has failed to establish *prima facie* obviousness of the invention. As described above in response to rejection of claim 14, which claim 16 depends from, the inventive chart is believed be novel over Teller. Accordingly, it is believed that the presently claimed invention is not obvious over Teller.

Claim 17: The Examiner indicates that it would have been obvious to consider infrequent movements of the baby as a factor to determine an abnormal situation in the Teller's monitoring system.

The Examiner has failed to establish *prima facie* obviousness of the invention. The Teller reference fails to disclose or suggest a chart comprising corrected skin temperature profile,

ambient temperature profile and a movement profile over a set time period as in the presently claimed invention.

Further, since claim 1, which claim 17 ultimately depends from, is believed to be distinguished from Teller as discussed above, Teller fails to provide any motivation to make a single device, comprising a skin temperature sensor connected to a microprocessor; a humidity sensor; a movement sensor; a display screen; and a means for communicating with a computer, which is connected to a repeater as in the presently claimed invention.

Teller also fails to disclose or suggest a method of facilitating determination of health of a baby by analyzing the data obtained by the inventive health monitoring device according to claim 1, wherein presence of high or rising corrected skin temperature compared with substantially level ambient temperature and substantially infrequent movement indicates that the baby is not healthy. And since Teller fails to provide any motivation to use its disclosed device for monitoring baby's movement, the Teller reference fails to be applicable to the claimed invention. Accordingly, the presently claimed invention is not obvious over Teller.

Claim 18: The Examiner states that the method disclosed in Teller comprises reviewing and analyzing the chart recited in claim 13, to determine a pattern of rise or fall in corrected skin temperature, which indicates the presence of an infection.

The Examiner has failed to establish *prima facie* obviousness of the invention. First of all, Teller fails to disclose a method of determining an infection. As described above in response to the rejection of claim 17, Teller also fails to disclose or suggest a chart comprising corrected

skin temperature profile, ambient temperature profile or a movement profile over a set time period as in the presently claimed invention.

Further, since claim 1, which claim 18 ultimately depends from, is believed to be distinguished from Teller as discussed above, Teller fails to provide any motivation to make a single device, comprising a skin temperature sensor connected to a microprocessor; a humidity sensor; a movement sensor; a display screen; and a means for communicating with a computer, which is connected to a repeater as in the presently claimed invention.

Teller also fails to disclose or suggest a method of determining an infection in a baby by reviewing and analyzing the chart. Accordingly, it is believed that the presently claimed invention is not obvious over Teller.

Claim 19: The Examiner states that though Teller fails to disclose reviewing and analyzing a corrected temperature profile, ambient temperature profile, and a movement profile of a baby and comparing the data with an established profile to identify a viral infection pattern, it would have been obvious to identify a viral infection using the method of Teller.

Applicant disagrees with the Examiner's statement. FIG. 9 of the present application shows time-correlated profiles of corrected skin temperature (T_{skin}); ambient temperature (T_{room}); and movement which is reviewed and analyzed to identify a viral infection pattern.

Further, since claim 1, which claim 19 ultimately depends from, is believed to be distinguished from Teller as discussed above, Teller fails to provide any motivation to make a single device, comprising a skin temperature sensor connected to a microprocessor; a humidity

sensor; a movement sensor; a display screen; and a means for communicating with a computer, which is connected to a repeater as in the presently claimed invention.

Furthermore, Teller fails to disclose or suggest a method of identifying a viral infection pattern comprising reviewing and analyzing a corrected temperature profile, ambient temperature profile of a baby and comparing the data with an established profile as in the presently claimed invention. Accordingly, it is believed that the presently claimed invention is not obvious over Teller.

Claim 20: The Examiner states that the established profile disclosed in Teller may be provided by a computer at home or computer at hospital, and stored in a common server that links computer at home and computer at hospital.

As described above in response to the rejection of claim 19, which claim 20 depends from, Teller fails to disclose analysis of corrected temperature profile, ambient temperature profile and movement profile. Accordingly, the presently claimed invention is not obvious over Teller.

Claim 21: The Examiner states that paragraph [0119] in Teller discloses a method of identifying early onset of a viral infection comprising reviewing and analyzing a corrected temperature profile, ambient temperature profile and movement profile of a baby and comparing them with an established profile, wherein matching profile indicates early onset of the viral infection.

Paragraph [0119] in Teller discloses that the sensor may include a combination of position or movement sensors and may be used to identify presence of a possibly undesirable or dangerous condition such as Sudden Infant Death Syndrome, which is believed not to be related to a viral infection but is known to be caused when babies sleep face down.

Further, since claim 1, which claim 21 ultimately depends from, is believed to be distinguished from Teller as discussed above, Teller fails to provide any motivation to make a single device, comprising a skin temperature sensor connected to a microprocessor; a humidity sensor; a movement sensor; a display screen; and a means for communicating with a computer, which is connected to a repeater as in the presently claimed invention.

Furthermore, Teller fails to disclose or suggest a method of identifying early onset of a viral infection as in the presently claimed invention. Accordingly, it is believed that the presently claimed invention is not obvious over Teller.

Conclusion

It is believed that the application is now in condition for allowance. Applicants request the Examiner to issue a notice of Allowance in due course. The Examiner is encouraged to contact the undersigned to further the prosecution of the present invention.

The Commissioner is authorized to charge JHK Law's Deposit Account No. **502486** for any fees required under 37 CFR § 1.16 and 1.17 and to credit any overpayment to said Deposit Account No. **502486**.

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Respectfully submitted,

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